4 GOVERNOR FAILURE

4.1 Large Drop in Fuel Flow Rate

Same symptoms as for complete engine failure but after a few seconds, Ng stabilizes at a low r.p.m. value (less than 70 %).

Establish autorotation I.A.S. 65 kt (120 km/hr), then advance the fuel

flow control into the emergency sector. Ng and t4 should rise.

. Control engine speed to 70 % Ng.

. If necessary, increase collective pitch to bring rotor speed to 350 r.p.m.

. Increase fuel flow until rotor speed is approximately 380 r.p.m. . Trim collective pitch and fuel flow control to hold level flight at this rotor speed.

4.2 Excessive Fuel Flow Rate

Ng, t4, NR and torque increase

Do not reduce collective pitch. Reduce fuel flow until rotor speed corresponds to a position of

the indicator pointer in the centre of the green area.

Continue flight with the governor out of action. Any reduction of collective pitch will cause an increase in rotor speed which must be counteracted by adjusting the fuel flow control position. In both cases mentioned above, the landing approach should be made along a low gradient path, at 65 knots (120 km/hr) I.A.S., holding the rotor at the upper limit of the green area (394 r.p.m.) using the fuel flow control. In final approach, reduce forward speed without touching the fuel flow control. The rotor speed will drop when the collective pitch is increased on touchdown. After touchdown, reduce the fuel flow control setting before decreasing the collective pitch.

4.3 Surging

Surging is evidenced by oscillations of the r.p.m., torque and t4 readings and jerks in the yaw axis.

Change the collective pitch setting.

If surging persists while fuel pressure and engine oil pressure are correct, reduce fuel flow slightly to leave the governed range. If surging still persists, land as soon as possible and shut down the engine if there is a tendency to divergence (see paragraph 2.1).

5 ENGINE FIRE

5.1 Fire during Engine Start

- Close the fuel shut-off cock and apply the rotor brake if necessary.
- Switch off the booster pump.
- Crank the engine for 10 seconds then switch off the battery.
- Use the nearby extinguishers to fight the fire.

350 BA

4 AIRSPEED-HEIGHT ENVELOPE

The avoidance zone (Z) is defined by four points : A, B, C, D.

Determining Points A and B

- Point A is located at a height of 8 ft (2.5 m) at zero airspeed.
- Point B is located at a height of 25 ft (8 m) for an airspeed of 40 knots (74 km/hr).

Determining Points C and D

- Point C

 - Point C
 Point C is defined by:
 . a constant height of 100 ft (30 m)
 . a variable airspeed depending on the altitude and on the aircraft weight as determined by line (C).
- Point D
 - Point D is defined by :
 - . a constant zero airspeed
 - . a variable height depending on the altitude and on the aircraft weight as determined by line (D).

FLIGHT MANUAL

